

**ABSTRACT OF DISCLOSURE**

An integrated circuit device comprises a pin for receiving a DC voltage component signal. The device comprises a signal source for applying an AC signal to the pin, a buffer for converting the AC signal into a digital signal, and a digital detector for detecting a frequency  
5 of the digital signal and outputting a predetermined detection signal. The predetermined detection signal is activated when the frequency of the digital signal is greater than or equal to a predetermined frequency. The predetermined detection signal is used as a signal for setting predetermined functional modes. The device further comprises registers or a differential amplifier and a decoder for generating a plurality of functional mode signals.